Amilan™ CM1026

Toray Industries, Inc. - Polyamide 6

General Information			
Product Description			
Medium viscosity, Heat stabilized			
General			
Additive	• Heat Stabilizer		
Features	• Chemical Resistant	• High Heat Resistance	
Uses	• Automotive Applications • Automotive Electronics	• Automotive Interior Parts • Furniture	• Safety Equipment
Processing Method	• Injection Molding		
ISO Designation	• >PA6<		

Properties [1]				
Physical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Density (73°F)	1.13	--	g/cm³	ISO 1183
Spiral Flow [2]	13.8	--	in	Internal Method
Molding Shrinkage				Internal Method
0.0394 in [3]	0.40 to 0.90	--	%	
0.118 in [4]	0.80 to 1.6	--	%	
Water Absorption [5] (24 hr, 73°F)	1.8	--	%	ISO 62
Water Absorption [5]				ISO 62
Saturation, 73°F	11	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Stress				ISO 527-2
-40°F	16000	14500	psi	
73°F	11600	5080	psi	
176°F	3630	2900	psi	
Tensile Strain (Yield, 73°F)	1.5	--	%	ISO 527-2
Tensile Strain (Break, 73°F)	> 50	> 50	%	ISO 527-2
Flexural Modulus				ISO 178
-40°F	551000	522000	psi	
73°F	377000	116000	psi	
176°F	102000	43500	psi	
Flexural Stress				ISO 178
-40°F	19600	18100	psi	
73°F	16000	5800	psi	
176°F	5800	3630	psi	
Compressive Stress (73°F)	11600	--	psi	ISO 604
Shear Strength (73°F)	10200	9430	psi	ASTM D732
Taber Abrasion Resistance				ISO 9352
1000 Cycles	3.00 to 4.00	--	mg	
Coefficient of Friction - vs. Metal [6]	0.15 to 0.20	--		Suzuki Method

Amilan™ CM1026

Toray Industries, Inc. - Polyamide 6

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-40°F	1.9	--	ft·lb/in²	
73°F	2.9	> 19	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179
-40°F	No Break	--		
73°F	No Break	--		
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Rockwell Hardness				ISO 2039-2
R-Scale, 73°F	119	90		
R-Scale, 176°F	80	--		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/B
66 psi, Unannealed	360	--	°F	
Melting Temperature	437	--	°F	DSC
Specific Heat	0.454	--	Btu/lb/°F	
Thermal Conductivity	1.7	--	Btu·in/hr/ft²/°F	
Coefficient of Linear Thermal Expansion	8	--	cm^-5/cm/°C	ISO 11359-2
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Volume Resistivity	1.0E+13 to 1.0E+14	1.0E+11 to 1.0E+12	ohms·cm	IEC 60093
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (0.06 in)	HB	HB		UL 94
Additional Information				
Dry	Conditioned Moisture Content 3.5%			

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] Melt Temperature: 500°F, Injection Pressure: 1.31E+4 psi, 0.0787 in

[3] 80x80x1mm

[4] 80x80x3mm

[5] in water

[6] Without Lubrication